

*1WS*

*B12*

SEQUENCE LISTING

<110> Soto, Ana, et al.

<120> A NOVEL ANDROGEN-INDUCED SUPPRESSOR OF CELL PROLIFERATION AND USES THEREOF

<130> MBI-008-1

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<170> PatentIn Ver. 2.0

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His Met Val Asp Leu Met Ser Ser Ile Ile Cys Glu Gly Asp Thr Val			
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His Asp Val Ile Val Ser Ile Val Thr Ala Ala Lys Lys Asp Ile Leu			
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850	855	860	
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 Ser Thr Leu Arg Leu Leu Thr Thr Ile Leu His Ser Asp Gly Asp Leu  
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 Ala Ala Gly Ser Ala Ile Val Lys Leu Ala Gln Glu Pro Cys Tyr His  
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 Glu Ile Ile Thr Leu Glu Gln Tyr Gln Leu Cys Ala Leu Ala Ile Asn  
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 Cys Leu Val Lys Asn Ile Asn Val Arg Arg Glu Tyr Leu Lys Gln His  
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 Pro Tyr Thr Ile His Leu Leu Ala His Asp Pro Asp Tyr Val Lys Val  
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1170

1175

1180

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Ser Arg Lys Arg Gly His Thr Ala Ser Glu Ser Asp Glu Gln Gln Trp  
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Pro Glu Glu Lys Arg Leu Lys Glu Asp Ile Leu Glu Asn Glu Asp Glu  
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Gln Asn Ser Pro Pro Lys Lys Gly Lys Arg Gly Arg Pro Pro Lys Pro  
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Leu Gly Gly Thr Pro Lys Glu Glu Pro Thr Met Lys Thr Ser Lys  
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Gln His Arg Val Ser Arg Arg Ala Gln Gln Arg Ala Glu Ser Pro Glu  
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 Pro Gly Val Lys Glu Ile Ser Asp Lys Ile Ser Lys Glu Glu Met Val  
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aga cga tta aag atg gtt gtg aaa act ttt atg gat atg gac cag gac 144  
 Arg Arg Leu Lys Met Val Val Lys Thr Phe Met Asp Met Asp Gln Asp  
 35 40 45

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Ser Glu Glu Glu Lys Glu Leu Tyr Leu Asn Leu Ala Leu His Leu Ala		
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Ser Asp Phe Phe Leu Lys His Pro Gly Lys Asp Val Arg Leu Leu Val		
65	70	75
80		
gcc tgc tgc ctt gct gat att ttc agg att tat gct cct gaa gct cct		288
Ala Cys Cys Leu Ala Asp Ile Phe Arg Ile Tyr Ala Pro Glu Ala Pro		
85	90	95
tac aca tcc cct gat aaa cta aag gat ata ttt atg ttt ata aca aga		336
Tyr Thr Ser Pro Asp Lys Leu Lys Asp Ile Phe Met Phe Ile Thr Arg		
100	105	110
cag ttg aag ggg cta gag gat aca aag agc cca caa ttc aat agg tat		384
Gln Leu Lys Gly Leu Glu Asp Thr Lys Ser Pro Gln Phe Asn Arg Tyr		
115	120	125
ttt tat tta ctt gag aac att gct tgg gtc aag tca tat aac ata tgc		432
Phe Tyr Leu Leu Glu Asn Ile Ala Trp Val Lys Ser Tyr Asn Ile Cys		
130	135	140
ttt gag tta gaa gat agc aat gaa att ttc acc cag cta tac aga acc		480
Phe Glu Leu Glu Asp Ser Asn Glu Ile Phe Thr Gln Leu Tyr Arg Thr		
145	150	155
160		
tta ttt tca gtt ata aac aat ggc cac aat cag aaa gtc cat atg cac		528
Leu Phe Ser Val Ile Asn Asn Gly His Asn Gln Lys Val His Met His		
165	170	175
atg gta gac ctt atg agc tct att att tgt gaa ggt gat aca gtg tct		576
Met Val Asp Leu Met Ser Ser Ile Ile Cys Glu Gly Asp Thr Val Ser		
180	185	190
cag gag ctt ttg gat acg gtt tta gta aat ctg gta cct gct cat aag		624
Gln Glu Leu Leu Asp Thr Val Leu Val Asn Leu Val Pro Ala His Lys		
195	200	205
aat tta aac aag caa gca tat gat ttg gca aag gct tta ctg aag agg		672
Asn Leu Asn Lys Gln Ala Tyr Asp Leu Ala Lys Ala Leu Leu Lys Arg		
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aca gct caa gct att gag cca tat att acc act ttt ttt aat cag gtt		720
Thr Ala Gln Ala Ile Glu Pro Tyr Ile Thr Thr Phe Phe Asn Gln Val		
225	230	235
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ctg atg ctt ggg aaa aca tct atc agc gat ttg tca gag cat gtc ttt		768
Leu Met Leu Gly Lys Thr Ser Ile Ser Asp Leu Ser Glu His Val Phe		
245	250	255
gac tta att ttg gag ctc tac aat att gat agt cat ttg ctg ctc tct		816
Asp Leu Ile Leu Glu Leu Tyr Asn Ile Asp Ser His Leu Leu Leu Ser		
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275		
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Val Leu Pro Gln Leu Glu Phe Lys Leu Lys Ser Asn Asp Asn Glu Glu		
280	285	
290	295	300
295		
300		

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agg ttt aat gat atc cat gta cca atc cgc ctg gaa tgt gtg aaa ttt Arg Phe Asn Asp Ile His Val Pro Ile Arg Leu Glu Cys Val Lys Phe 325	330	335		1008
gct agc cat tgt ctc atg aac cat cct gat tta gca aaa gac tta aca Ala Ser His Cys Leu Met Asn His Pro Asp Leu Ala Lys Asp Leu Thr 340	345	350		1056
gag tat ctt aaa gtg agg tca cat gac cct gag gaa gct att aga cat Glu Tyr Leu Lys Val Arg Ser His Asp Pro Glu Ala Ile Arg His 355	360	365		1104
gat gtt att gtg tca ata gtt aca gct gct aaa aag gat att ctt ctg Asp Val Ile Val Ser Ile Val Thr Ala Ala Lys Lys Asp Ile Leu Leu 370	375	380		1152
gtc aat gat cac tta ctt aat ttt gtg aga gag aga aca tta gac aaa Val Asn Asp His Leu Leu Asn Phe Val Arg Glu Arg Thr Leu Asp Lys 385	390	395	400	1200
cga tgg aga gta cgc aaa gaa gcc atg atg gga ctt gcc caa att tat Arg Trp Arg Val Arg Lys Glu Ala Met Met Gly Leu Ala Gln Ile Tyr 405	410	415		1248
aag aaa tat gct tta cag tca gca gct gga aaa gat gct gca aaa cag Lys Lys Tyr Ala Leu Gln Ser Ala Ala Gly Lys Asp Ala Ala Lys Gln 420	425	430		1296
ata gca tgg atc aaa gac aaa ttg cta cat ata tat tat caa aat agt Ile Ala Trp Ile Lys Asp Lys Leu Leu His Ile Tyr Tyr Gln Asn Ser 435	440	445		1344
att gat gat cga cta ctt gtt gaa cg <sup>g</sup> atc ttt gct caa tac atg gtt Ile Asp Asp Arg Leu Leu Val Glu Arg Ile Phe Ala Gln Tyr Met Val 450	455	460		1392
cct cac aat tta gaa act aca gaa cg <sup>g</sup> atg aaa tgc tta tat tac ttg Pro His Asn Leu Glu Thr Thr Glu Arg Met Lys Cys Leu Tyr Tyr Leu 465	470	475	480	1440
tat gcc aca ctg gat tta aat gct gtg aaa gca ttg aat gaa atg tgg Tyr Ala Thr Leu Asp Leu Asn Ala Val Lys Ala Leu Asn Glu Met Trp 485	490	495		1488
aaa tgt caa aat ctg ctc cga cat caa gta aag gat ttg ctt gac ttg Lys Cys Gln Asn Leu Leu Arg His Gln Val Lys Asp Leu Leu Asp Leu 500	505	510		1536
att aag caa ccc aaa aca gat gcc agt gtc aag gcc ata ttt tca aaa Ile Lys Gln Pro Lys Thr Asp Ala Ser Val Lys Ala Ile Phe Ser Lys 515	520	525		1584
gtg atg gtt att aca aga aat tta cct gat cct ggt aag gct cag gat Val Met Val Ile Thr Arg Asn Leu Pro Asp Pro Gly Lys Ala Gln Asp 530	535	540		1632
ttc atg aag aaa ttc aca cag gtg tta gaa gat gat gag aaa ata aga Phe Met Lys Lys Phe Thr Gln Val Leu Glu Asp Asp Glu Lys Ile Arg 545	550	555	560	1680

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gaa ggt tgt gtg cgt gaa ata act aag aag ttg ggc aac ccc aaa cag Glu Gly Cys Val Arg Glu Ile Thr Lys Lys Leu Gly Asn Pro Lys Gln 580 585 590	1776
cct aca aat cct ttc ctg gaa atg atc aag ttt ctc ttg gag agg ata Pro Thr Asn Pro Phe Leu Glu Met Ile Lys Phe Leu Leu Glu Arg Ile 595 600 605	1824
gca cct gtg cac ata gat acc gaa tct atc agt gct ctt att aaa caa Ala Pro Val His Ile Asp Thr Glu Ser Ile Ser Ala Leu Ile Lys Gln 610 615 620	1872
gtg aac aaa tca ata gat gga aca gca gat gat gaa gat gag ggt gtt Val Asn Lys Ser Ile Asp Gly Thr Ala Asp Asp Glu Asp Glu Gly Val 625 630 635 640	1920
cca act gat caa gcc atc aga gca ggt ctt gaa ctg ctt aag gta ctc Pro Thr Asp Gln Ala Ile Arg Ala Gly Leu Glu Leu Leu Lys Val Leu 645 650 655	1968
tca ttt aca cat ccc atc tca ttt cat tct gct gaa aca ttt gaa tca Ser Phe Thr His Pro Ile Ser Phe His Ser Ala Glu Thr Phe Glu Ser 660 665 670	2016
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gtt cga tgg cta ctt gga atg aaa aat aat cac agt aaa tca gga act Val Arg Trp Leu Leu Gly Met Lys Asn Asn His Ser Lys Ser Gly Thr	835	840	845	2544
tct acc tta aga ttg cta aca aca ata ttg cat agt gat gga gac ttg Ser Thr Leu Arg Leu Leu Thr Thr Ile Leu His Ser Asp Gly Asp Leu	850	855	860	2592
aca gaa cag ggg aaa att agt aaa cca gat atg tca cgt ctg aga ctt Thr Glu Gln Gly Lys Ile Ser Lys Pro Asp Met Ser Arg Leu Arg Leu	865	870	875	2640
gct gct ggg agt gct att gtg aag ctg gca caa gaa ccc tgt tac cat Ala Ala Gly Ser Ala Ile Val Lys Leu Ala Gln Glu Pro Cys Tyr His	885	890	895	2688
gaa atc atc aca tta gaa caa tat cag cta tgt gca tta gct atc aac Glu Ile Ile Thr Leu Glu Gln Tyr Gln Leu Cys Ala Leu Ala Ile Asn	900	905	910	2736
gat gaa tgc tat caa gta aga caa gtg ttt gcc cag aaa ctt cac aaa Asp Glu Cys Tyr Gln Val Arg Gln Val Phe Ala Gln Lys Leu His Lys	915	920	925	2784
ggc ctt tcc cgt tta cgg ctt cca ctt gag tat atg gca atc tgt gcc Gly Leu Ser Arg Leu Arg Leu Pro Leu Glu Tyr Met Ala Ile Cys Ala	930	935	940	2832
ctt tgt gca aaa gat cct gta aag gag aga aga gct cat gct agg caa Leu Cys Ala Lys Asp Pro Val Lys Glu Arg Arg Ala His Ala Arg Gln	945	950	955	2880
tgt ttg gtg aaa aat ata aat gta agg cgg gag tat ctg aag cag cat Cys Leu Val Lys Asn Ile Asn Val Arg Arg Glu Tyr Leu Lys Gln His	965	970	975	2928
gca gct gtt agt gaa aaa tta ttg tct ctt cta cca gag tat gtt gtt Ala Ala Val Ser Glu Lys Leu Leu Ser Leu Leu Pro Glu Tyr Val Val	980	985	990	2976
cca tat aca att cac ctt ttg gca cat gac cca gat tat gtc aaa gta Pro Tyr Thr Ile His Leu Leu Ala His Asp Pro Asp Tyr Val Lys Val	995	1000	1005	3024
cag gat att gaa caa ctt aaa gat gtt aaa gaa tgt ctt tgg ttt gtt Gln Asp Ile Glu Gln Leu Lys Asp Val Lys Glu Cys Leu Trp Phe Val	1010	1015	1020	3072
ctg gaa ata tta atg gct aaa aat gaa aat aac agt cac gct ttt atc Leu Glu Ile Leu Met Ala Lys Asn Glu Asn Asn Ser His Ala Phe Ile	1025	1030	1035	3120
aga aag atg gta gaa aat att aaa caa aca aaa gat gcc caa gga cca Arg Lys Met Val Glu Asn Ile Lys Gln Thr Lys Asp Ala Gln Gly Pro	1045	1050	1055	3168
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cag cac cga gtg tca agg aga gca cag cag aga gca gaa tct cct gaa Gln His Arg Val Ser Arg Arg Ala Gln Gln Arg Ala Glu Ser Pro Glu 1345                   1350                   1355                   1360	4080
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tta aac cta gct tta cat ctt gct tca gat ttt ttt ctc aag cat cct 365 Leu Asn Leu Ala Leu His Leu Ala Ser Asp Phe Phe Leu Lys His Pro 60                      65                      70	
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agg att tat gct cct gaa gct cct tac aca tcc cct gat aaa cta aag 461 Arg Ile Tyr Ala Pro Glu Ala Pro Tyr Thr Ser Pro Asp Lys Leu Lys 90                      95                      100	
gat ata ttt atg ttt ata aca aga cag ttg aag ggg cta gag gat aca 509 Asp Ile Phe Met Phe Ile Thr Arg Gln Leu Lys Gly Leu Glu Asp Thr 105                    110                    115                    120	
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Lys Ser Pro Gln Phe Asn Arg Tyr Phe Tyr Leu Leu Glu Asn Ile Ala			
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Trp Val Lys Ser Tyr Asn Ile Cys Phe Glu Leu Glu Asp Ser Asn Glu			
140	145	150	
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Ile Phe Thr Gln Leu Tyr Arg Thr Leu Phe Ser Val Ile Asn Asn Gly			
155	160	165	
cac aat cag aaa gtc cat atg cac atg gta gac ctt atg agc tct att	701		
His Asn Gln Lys Val His Met His Met Val Asp Leu Met Ser Ser Ile			
170	175	180	
att tgt gaa ggt gat aca gtg tct cag gag ctt ttg gat acg gtt tta	749		
Ile Cys Glu Gly Asp Thr Val Ser Gln Glu Leu Leu Asp Thr Val Leu			
185	190	195	200
gta aat ctg gta cct gct cat aag aat tta aac aag caa gca tat gat	797		
Val Asn Leu Val Pro Ala His Lys Asn Leu Asn Lys Gln Ala Tyr Asp			
205	210	215	
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220	225	230	
att acc act ttt ttt aat cag gtt ctg atg ctt ggg aaa aca tct atc	893		
Ile Thr Thr Phe Phe Asn Gln Val Leu Met Leu Gly Lys Thr Ser Ile			
235	240	245	
agc gat ttg tca gag cat gtc ttt gac tta att ttg gag ctc tac aat	941		
Ser Asp Leu Ser Glu His Val Phe Asp Leu Ile Leu Glu Leu Tyr Asn			
250	255	260	
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Ile Asp Ser His Leu Leu Ser Val Leu Pro Gln Leu Glu Phe Lys			
265	270	275	280
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Leu Lys Ser Asn Asp Asn Glu Glu Arg Leu Gln Val Val Lys Leu Leu			
285	290	295	
gca aaa atg ttt ggg gca aag gat tca gaa ttg gct tct caa aac aag	1085		
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Pro Leu Trp Gln Cys Tyr Leu Gly Arg Phe Asn Asp Ile His Val Pro			
315	320	325	
atc cgc ctg gaa tgt gtg aaa ttt gct agc cat tgt ctc atg aac cat	1181		
Ile Arg Leu Glu Cys Val Lys Phe Ala Ser His Cys Leu Met Asn His			
330	335	340	
cct gat tta gca aaa gac tta aca gag tat ctt aaa gtg agg tca cat	1229		
Pro Asp Leu Ala Lys Asp Leu Thr Glu Tyr Leu Lys Val Arg Ser His			
345	350	355	360
gac cct gag gaa gct att aga cat gat gtt att gtg tca ata gtt aca	1277		
Asp Pro Glu Glu Ala Ile Arg His Asp Val Ile Val Ser Ile Val Thr			
365	370	375	
gct gct aaa aag gat att ctt ctg gtc aat gat cac tta ctt aat ttt	1325		

Ala Ala Lys Lys Asp Ile Leu Leu Val Asn Asp His Leu Leu Asn Phe			
380	385	390	
gtg aga gag aga aca tta gac aaa cga tgg aga gta cgc aaa gaa gcc			1373
Val Arg Glu Arg Thr Leu Asp Lys Arg Trp Arg Val Arg Lys Glu Ala			
395	400	405	
atg atg gga ctt gcc caa att tat aag aaa tat gct tta cag tca gca			1421
Met Met Gly Leu Ala Gln Ile Tyr Lys Tyr Ala Leu Gln Ser Ala			
410	415	420	
gct gga aaa gat gct gca aaa cag ata gca tgg atc aaa gac aaa ttg			1469
Ala Gly Lys Asp Ala Ala Lys Gln Ile Ala Trp Ile Lys Asp Lys Leu			
425	430	435	440
cta cat ata tat tat caa aat agt att gat gat cga cta ctt gtt gaa			1517
Leu His Ile Tyr Tyr Gln Asn Ser Ile Asp Asp Arg Leu Leu Val Glu			
445	450	455	
cgg atc ttt gct caa tac atg gtt cct cac aat tta gaa act aca gaa			1565
Arg Ile Phe Ala Gln Tyr Met Val Pro His Asn Leu Glu Thr Thr Glu			
460	465	470	
cgg atg aaa tgc tta tat tac ttg tat gcc aca ctg gat tta aat gct			1613
Arg Met Lys Cys Leu Tyr Tyr Leu Tyr Ala Thr Leu Asp Leu Asn Ala			
475	480	485	
gtg aaa gca ttg aat gaa atg tgg aaa tgt caa aat ctg ctc cga cat			1661
Val Lys Ala Leu Asn Glu Met Trp Lys Cys Gln Asn Leu Leu Arg His			
490	495	500	
caa gta aag gat ttg ctt gac ttg att aag caa ccc aaa aca gat gcc			1709
Gln Val Lys Asp Leu Leu Asp Leu Ile Lys Gln Pro Lys Thr Asp Ala			
505	510	515	520
agt gtc aag gcc ata ttt tca aaa gtg atg gtt att aca aga aat tta			1757
Ser Val Lys Ala Ile Phe Ser Lys Val Met Val Ile Thr Arg Asn Leu			
525	530	535	
cct gat cct ggt aag gct cag gat ttc atg aag aaa ttc aca cag gtg			1805
Pro Asp Pro Gly Lys Ala Gln Asp Phe Met Lys Lys Phe Thr Gln Val			
540	545	550	
tta gaa gat gat gag aaa ata aga aag cag tta gaa gta ctt gtt agt			1853
Leu Glu Asp Asp Glu Lys Ile Arg Lys Gln Leu Glu Val Leu Val Ser			
555	560	565	
cca aca tgc tcc tgc aag cag gct gaa ggt tgt gtg cgt gaa ata act			1901
Pro Thr Cys Ser Cys Lys Gln Ala Glu Gly Cys Val Arg Glu Ile Thr			
570	575	580	
aag aag ttg ggc aac ccc aaa cag cct aca aat cct ttc ctg gaa atg			1949
Lys Lys Leu Gly Asn Pro Lys Gln Pro Thr Asn Pro Phe Leu Glu Met			
585	590	595	600
atc aag ttt ctc ttg gag agg ata gca cct gtg cac ata gat acc gaa			1997
Ile Lys Phe Leu Leu Glu Arg Ile Ala Pro Val His Ile Asp Thr Glu			
605	610	615	
tct atc agt gct ctt att aaa caa gtg aac aaa tca ata gat gga aca			2045
Ser Ile Ser Ala Leu Ile Lys Gln Val Asn Lys Ser Ile Asp Gly Thr			
620	625	630	
gca gat gat gaa gat gag ggt gtt cca act gat caa gcc atc aga gca			2093

Ala Asp Asp Glu Asp Glu Gly Val Pro Thr Asp Gln Ala Ile Arg Ala		
635	640	645
ggt ctt gaa ctg ctt aag gta ctc tca ttt aca cat ccc atc tca ttt		2141
Gly Leu Glu Leu Leu Lys Val Leu Ser Phe Thr His Pro Ile Ser Phe		
650	655	660
cat tct gct gaa aca ttt gaa tca tta ctg gct tgt ctg aaa atg gat		2189
His Ser Ala Glu Thr Phe Glu Ser Leu Leu Ala Cys Leu Lys Met Asp		
665	670	675
680		
gat gaa aaa gta gca gaa gct gca cta caa att ttc aaa aac aca gga		2237
Asp Glu Lys Val Ala Glu Ala Ala Leu Gln Ile Phe Lys Asn Thr Gly		
685	690	695
700		
705		
710		
gtt tta cat cac aaa tct aaa aac gga ccc ccc cgt caa gcc aaa tat		2333
Val Leu His His Lys Ser Lys Lys Gly Pro Pro Arg Gln Ala Lys Tyr		
715	720	725
730		
735		
740		
gca cag ata ttt gag cct ctg cat aag agc cta gat cca agc aac ctg		2429
Ala Gln Ile Phe Glu Pro Leu His Lys Ser Leu Asp Pro Ser Asn Leu		
745	750	755
760		
gaa cat ctc ata aca cca ttg gtt act att ggt cat att gct ctc ctt		2477
Glu His Leu Ile Thr Pro Leu Val Thr Ile Gly His Ile Ala Leu Leu		
765	770	775
780		
785		
790		
att gtg aaa gat ctt ctc atg aat gat cgg ctt cca ggg aaa aag aca		2573
Ile Val Lys Asp Leu Leu Met Asn Asp Arg Leu Pro Gly Lys Lys Thr		
795	800	805
810		
815		
820		
act aaa ctt tgg gtt cca gat gaa gaa gta tct cct gag aca atg gtc		2621
Thr Lys Leu Trp Val Pro Asp Glu Glu Val Ser Pro Glu Thr Met Val		
825	830	835
840		
aaa att cag gct att aaa atg atg gtt cga tgg cta ctt gga atg aaa		2669
Lys Ile Gln Ala Ile Lys Met Met Val Arg Trp Leu Leu Gly Met Lys		
845	850	855
860		
865		
870		
ata ttg cat agt gat gga gac ttg aca gaa cag ggg aaa att agt aaa		2765
Ile Leu His Ser Asp Gly Asp Leu Thr Glu Gln Gly Lys Ile Ser Lys		
875	880	885
890		
ctg gca caa gaa ccc tgt tac cat gaa atc atc aca tta gaa caa tat		2861

Leu Ala Gln Glu Pro Cys Tyr His Glu Ile Ile Thr Leu Glu Gln Tyr		
890	895	900
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Gln Leu Cys Ala Leu Ala Ile Asn Asp Glu Cys Tyr Gln Val Arg Gln		
905	910	915
920		
gtg ttt gcc cag aaa ctt cac aaa ggc ctt tcc cgt tta cgg ctt cca		2957
Val Phe Ala Gln Lys Leu His Gly Leu Ser Arg Leu Arg Leu Pro		
925	930	935
ctt gag tat atg gca atc tgt gcc ctt tgt gca aaa gat cct gta aag		3005
Leu Glu Tyr Met Ala Ile Cys Ala Leu Cys Ala Lys Asp Pro Val Lys		
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gag aga aga gct cat gct agg caa tgt ttg gtg aaa aat ata aat gta		3053
Glu Arg Arg Ala His Ala Arg Gln Cys Leu Val Lys Asn Ile Asn Val		
955	960	965
agg cgg gag tat ctg aag cag cat gca gct gtt agt gaa aaa tta ttg		3101
Arg Arg Glu Tyr Leu Lys Gln His Ala Ala Val Ser Glu Lys Leu Leu		
970	975	980
tct ctt cta cca gag tat gtt gtt cca tat aca att cac ctt ttg gca		3149
Ser Leu Leu Pro Glu Tyr Val Val Pro Tyr Thr Ile His Leu Leu Ala		
985	990	995
1000		
cat gac cca gat tat gtc aaa gta cag gat att gaa caa ctt aaa gat		3197
His Asp Pro Asp Tyr Val Lys Val Gln Asp Ile Glu Gln Leu Lys Asp		
1005	1010	1015
gtt aaa gaa tgt ctt tgg ttt gtt ctg gaa ata tta atg gct aaa aat		3245
Val Lys Glu Cys Leu Trp Phe Val Leu Glu Ile Leu Met Ala Lys Asn		
1020	1025	1030
gaa aat aac agt cac gct ttt atc aga aag atg gta gaa aat att aaa		3293
Glu Asn Asn Ser His Ala Phe Ile Arg Lys Met Val Glu Asn Ile Lys		
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Gln Thr Lys Asp Ala Gln Gly Pro Asp Asp Ala Lys Met Asn Glu Lys		
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Leu Tyr Thr Val Cys Asp Val Ala Met Asn Ile Ile Met Ser Lys Ser		
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1080		
act aca tac agt ttg gaa tct cct aaa gac ccg gta cta cca gct cgt		3437
Thr Thr Tyr Ser Leu Glu Ser Pro Lys Asp Pro Val Leu Pro Ala Arg		
1085	1090	1095
ttc ttc act caa cct gac aag aat ttc agt aac acc aaa aat tat ctg		3485
Phe Phe Thr Gln Pro Asp Lys Asn Phe Ser Asn Thr Lys Asn Tyr Leu		
1100	1105	1110
cct cct gaa atg aaa tca ttt ttc act cct gga aaa cct aaa aca acc		3533
Pro Pro Glu Met Lys Ser Phe Phe Thr Pro Gly Lys Pro Lys Thr Thr		
1115	1120	1125
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Asn Val Leu Gly Ala Val Asn Lys Pro Leu Ser Ser Ala Gly Lys Gln		
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18